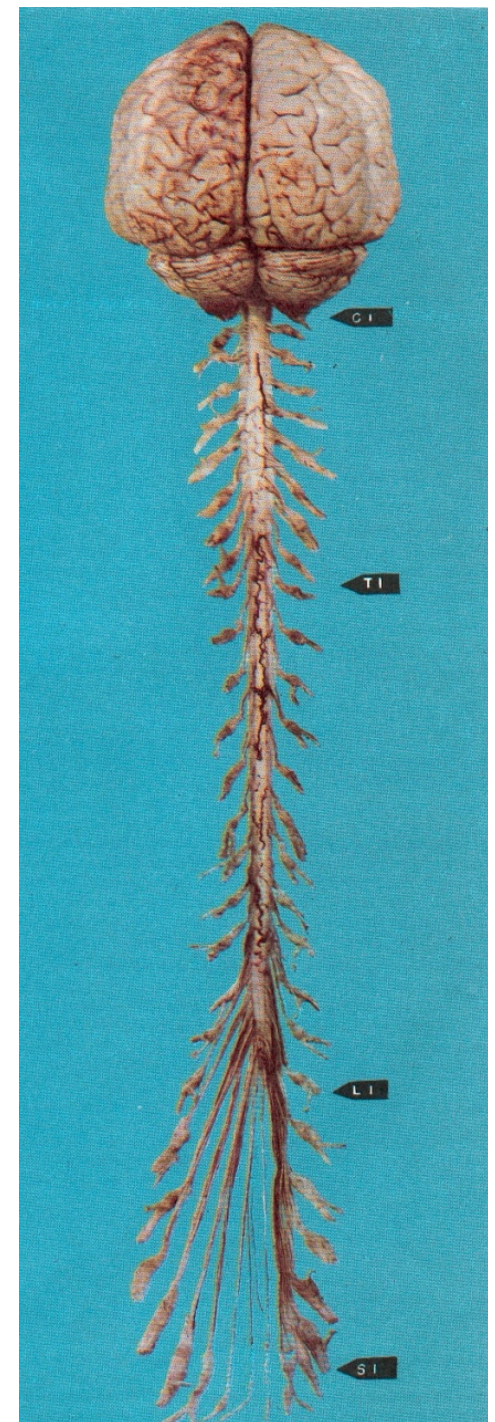


MEDULLA

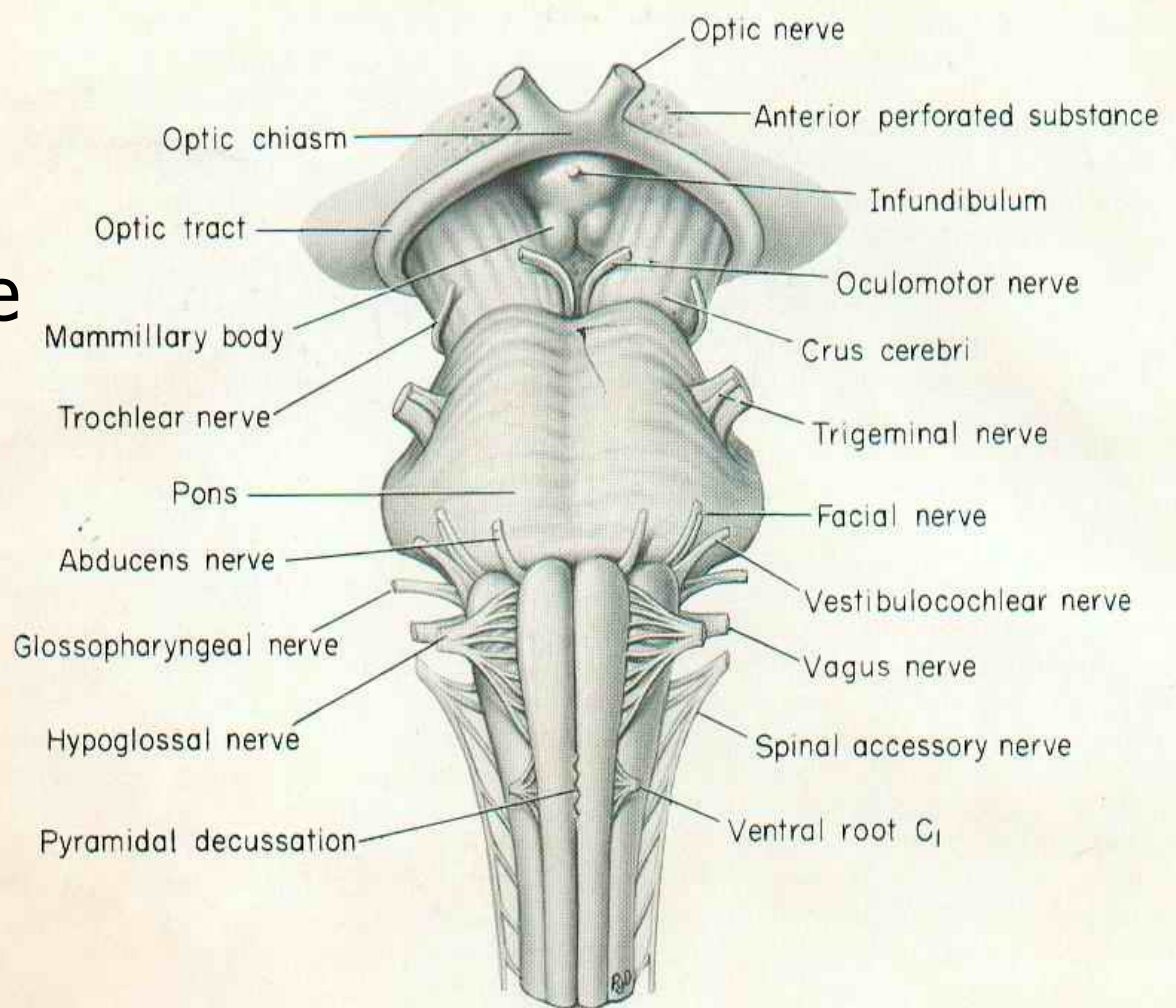
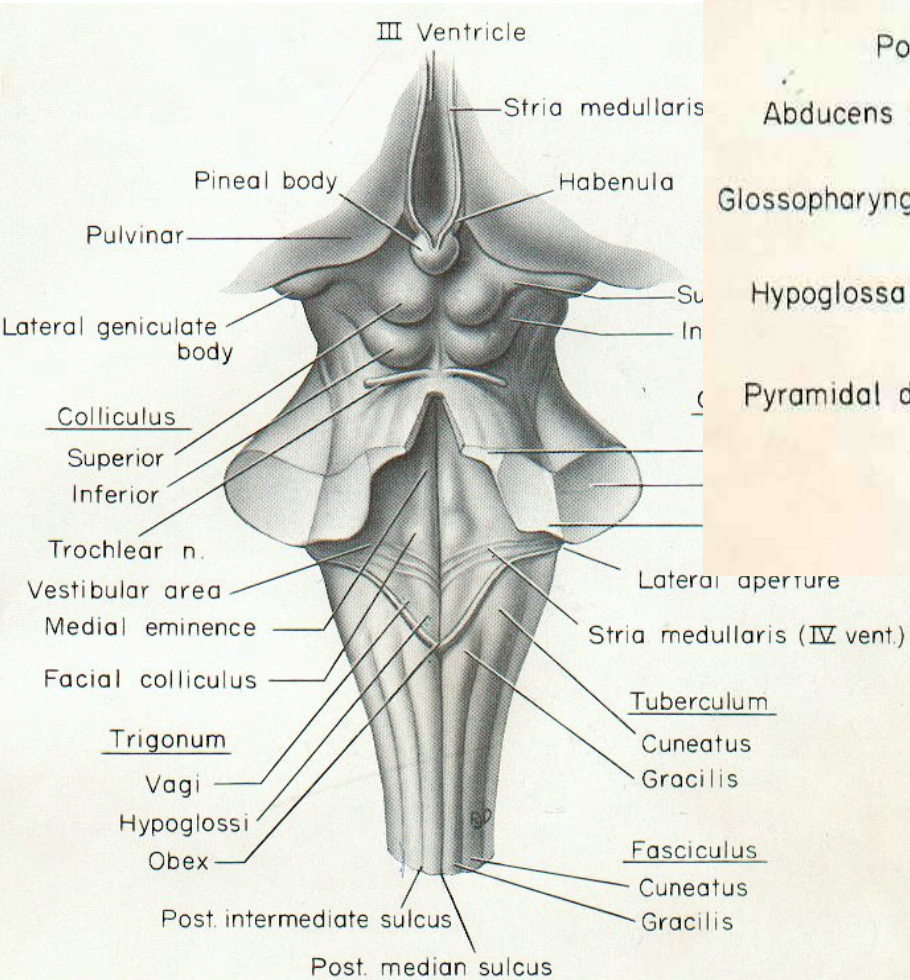
OBLONGATA ProfDrMTY

Medulla Oblongata

- The lowest part of brain stem



- Anterior surface
- Posterior surface



Structures featuring anterior surface (from midline to lateral)

Ant Median fissure

Pyramid

Pyramidal Decussation

Anterolateral Sulcus

Hypoglossal n

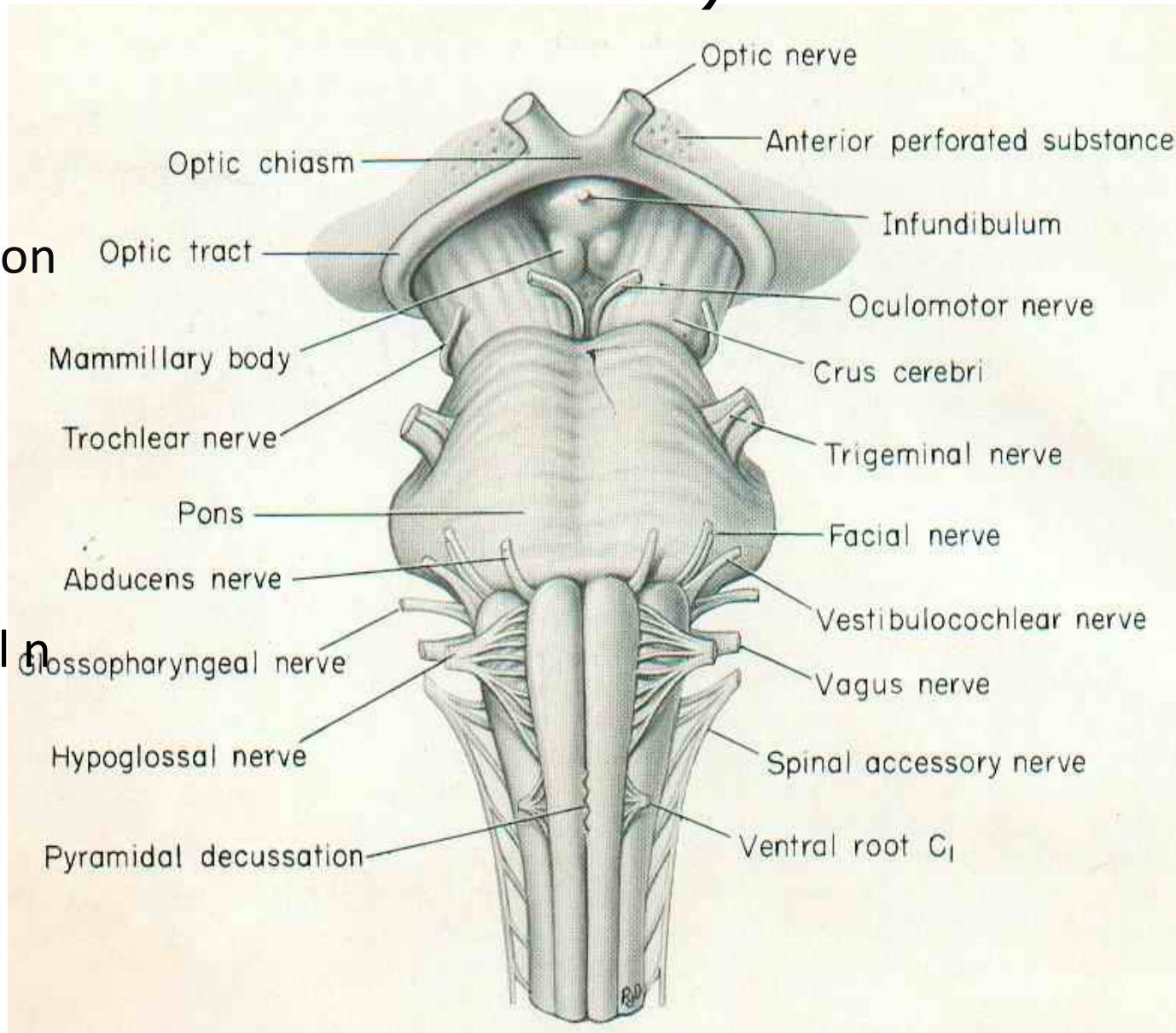
Olive

Retroolivary Sulcus

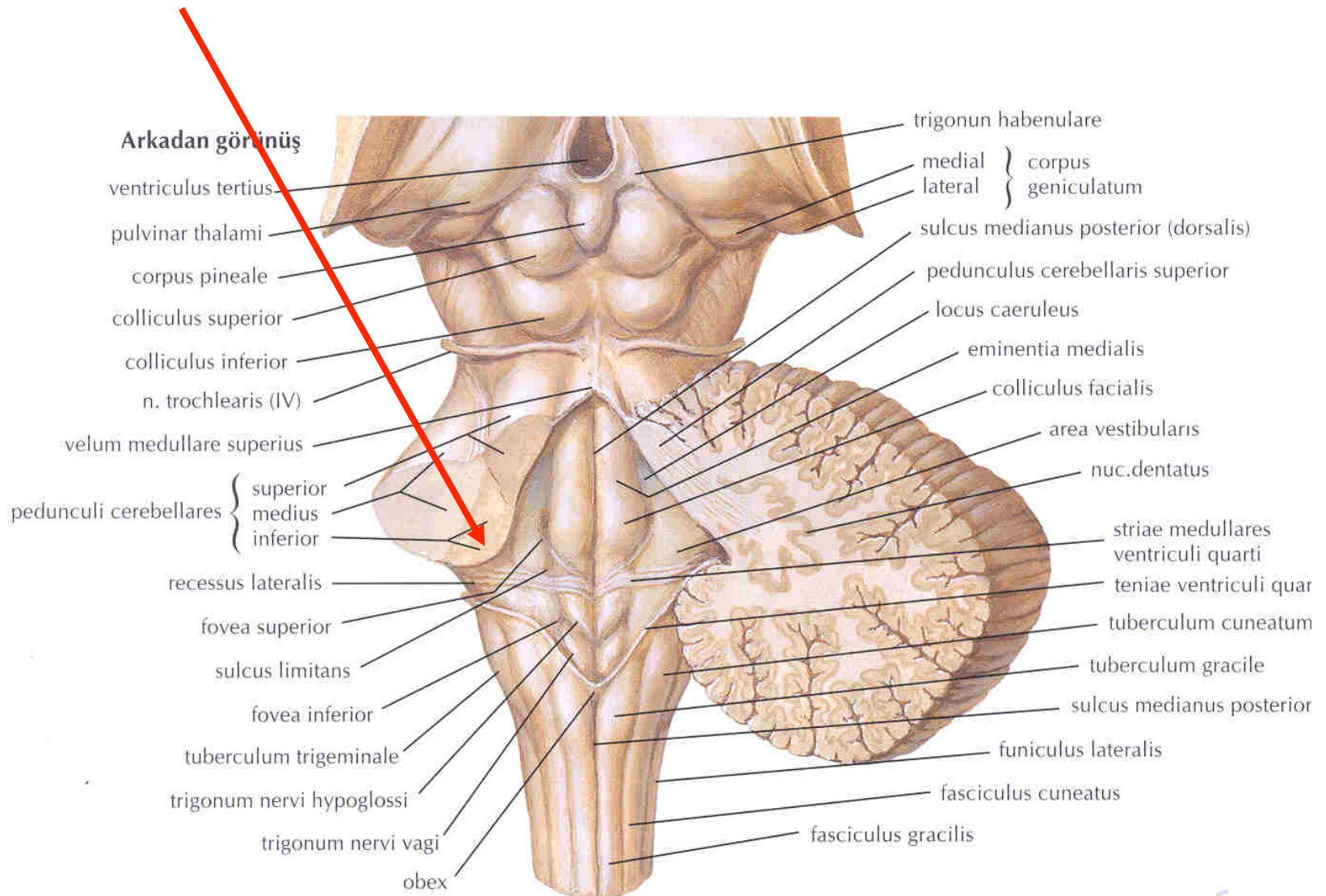
Glossopharyngeal n

Vagus n

Accessory n

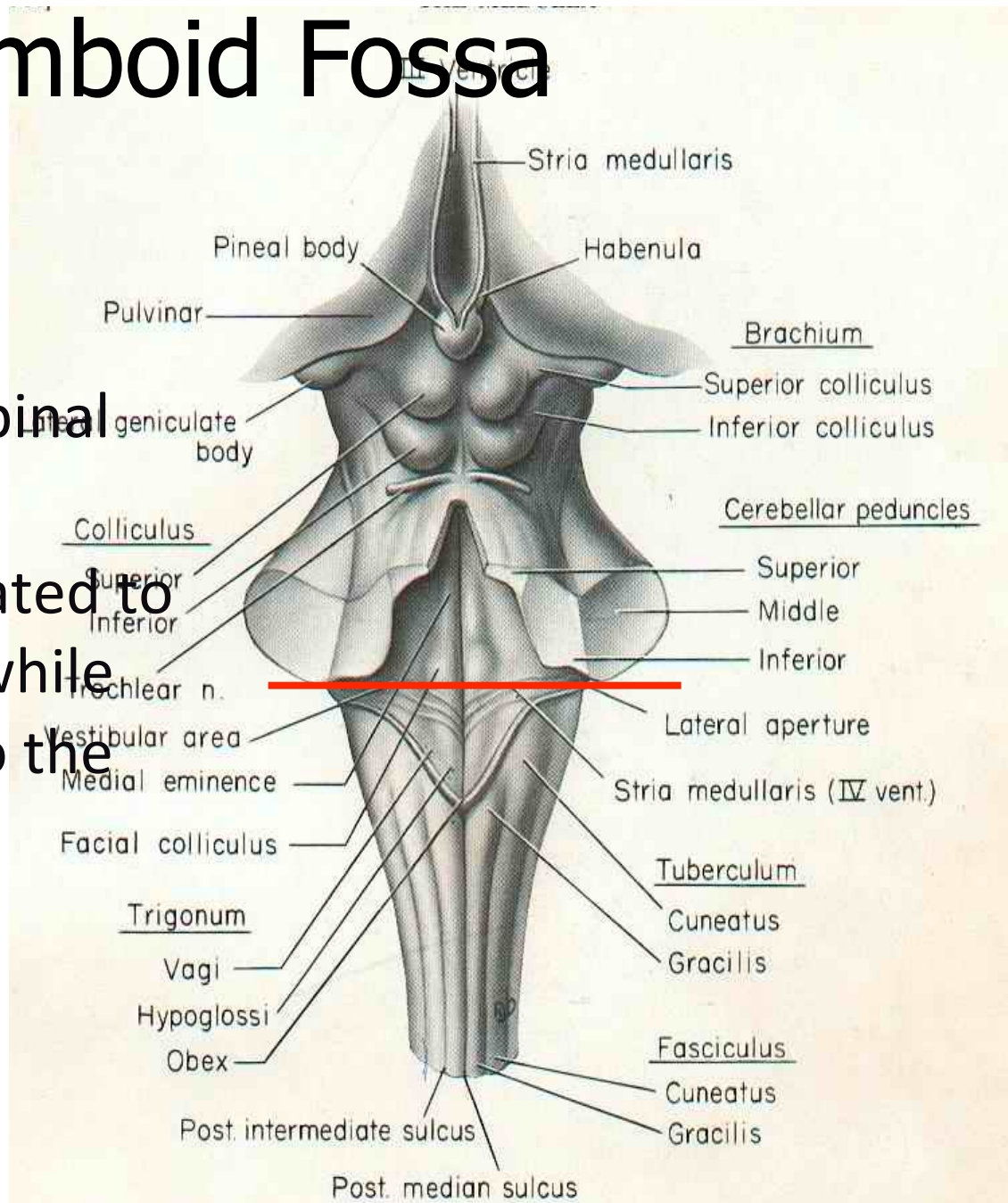


Inferior Cerebellar Peduncle connects medulla to cerebellum



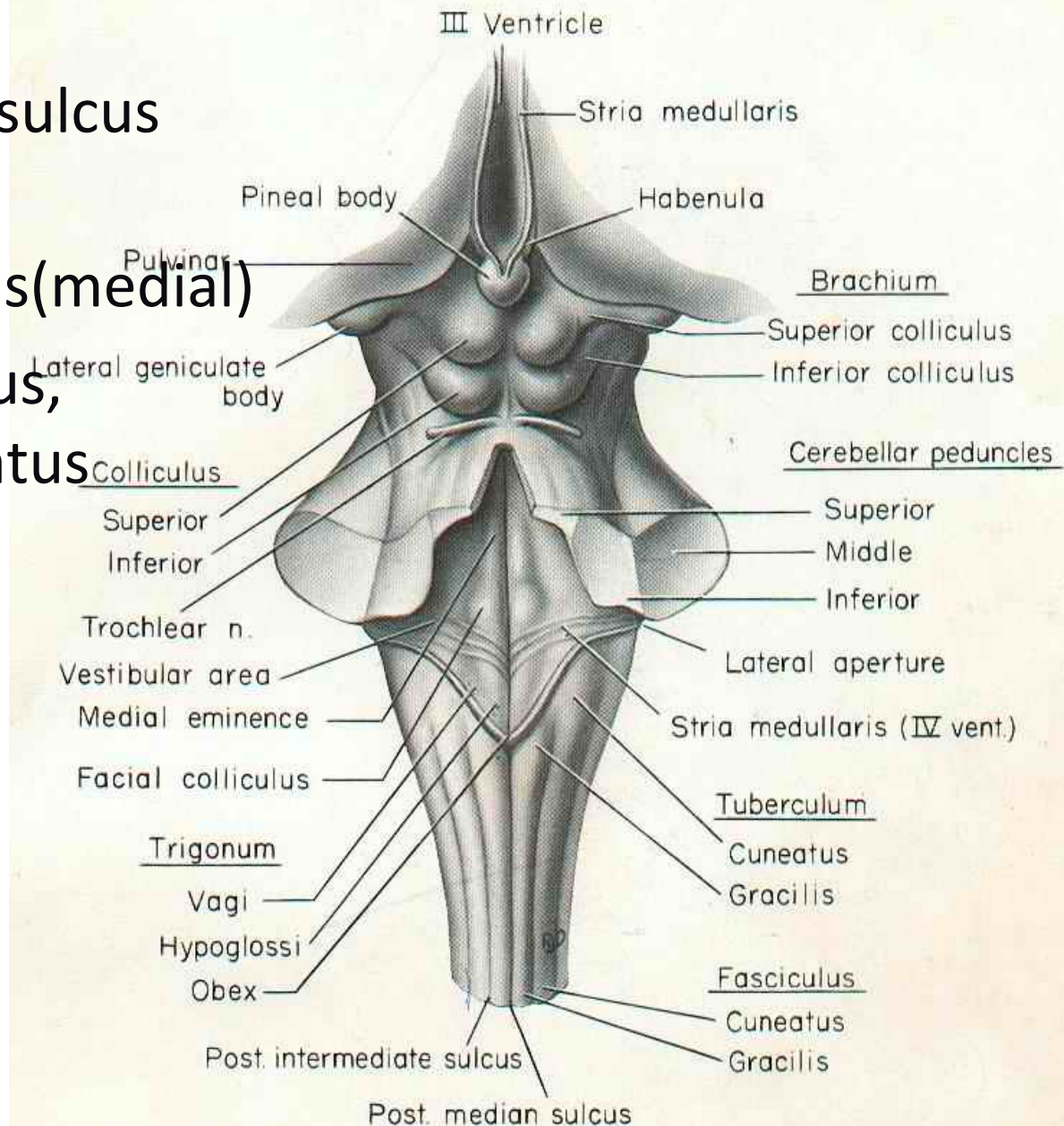
Rhomboid Fossa

- Space bw medulla, pons&cerebellum
- Filled with cerebrospinal fluid (4th ventricle)
- Lower triangle is related to medulla oblongata while the upper triangle to the pons

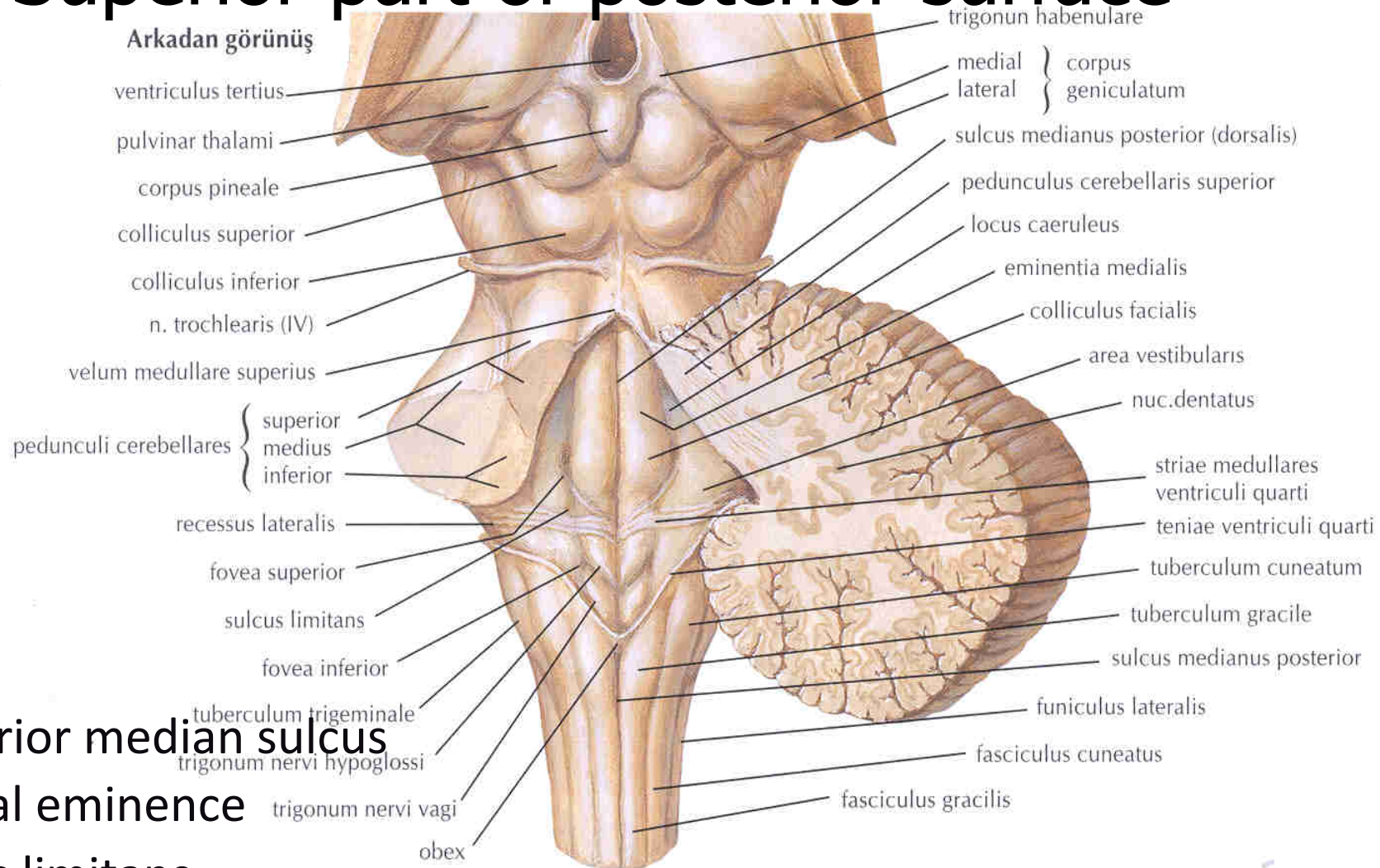


Inferior part of posterior surface

- Posterior median sulcus
- Fasciculus gracilis, tuberculum gracilis(medial)
- Fasciculus cuneatus, tuberculum cuneatus (lateral)

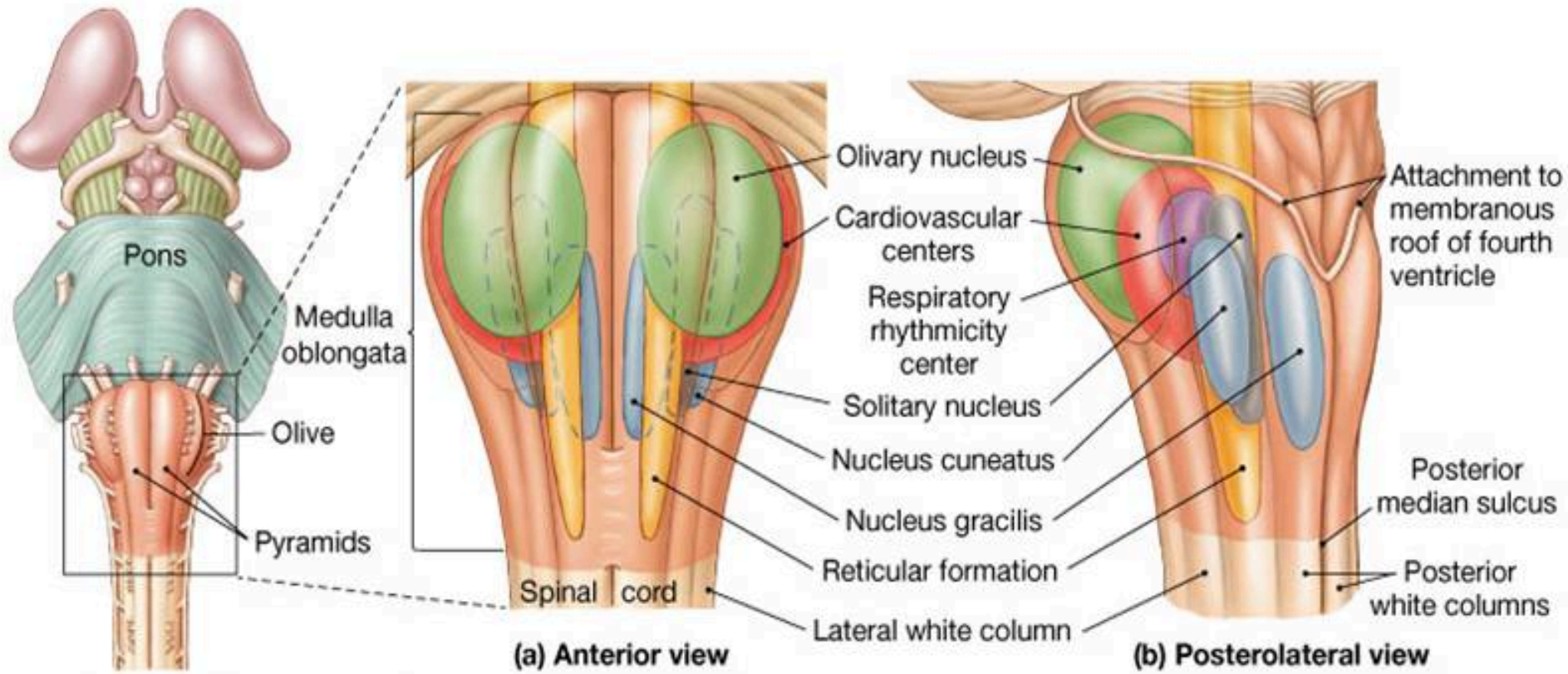


Superior part of posterior surface



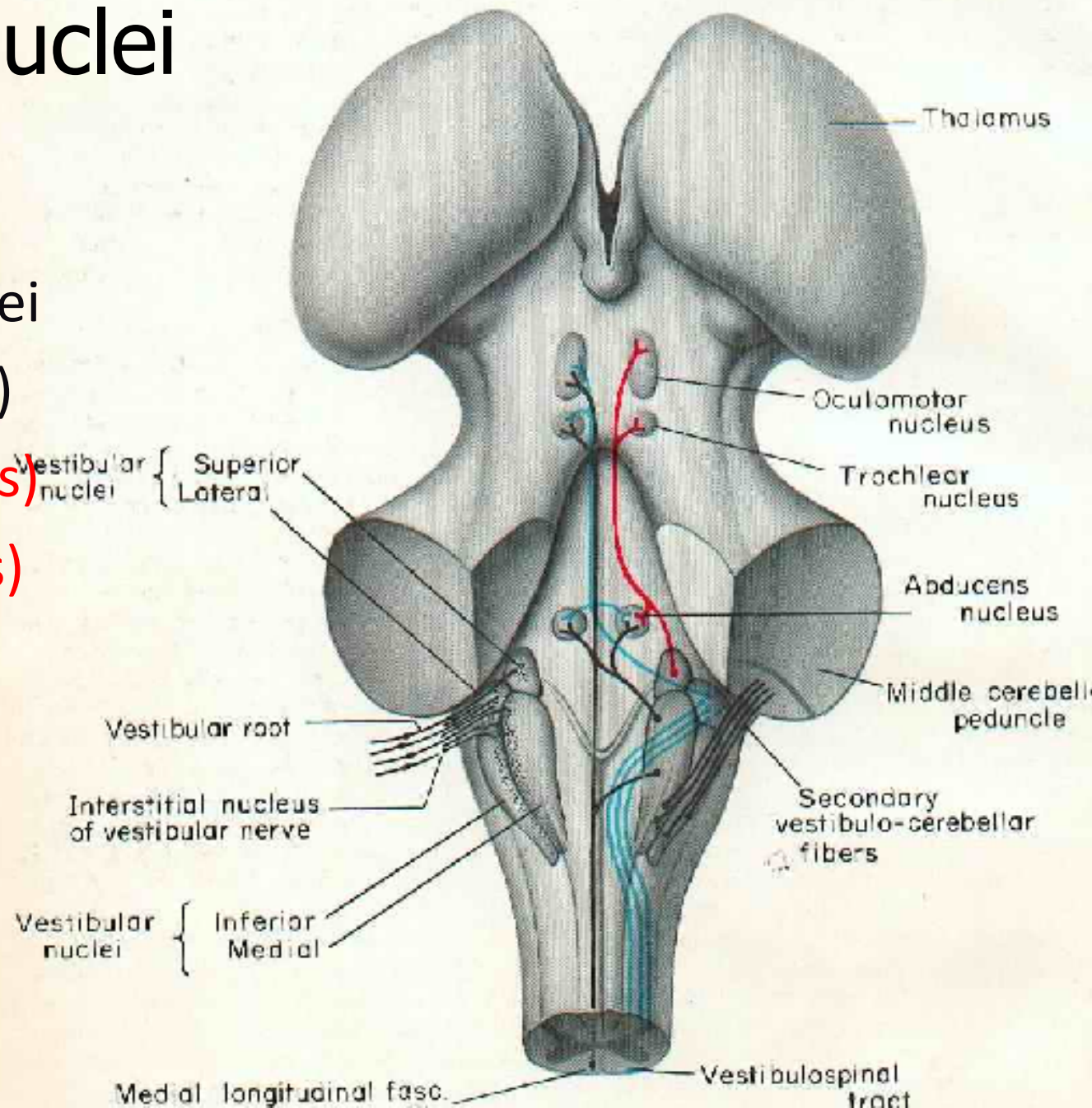
- Posterior median sulcus
- Medial eminence
- Sulcus limitans
- Vestibular area
- Stria medullaris

Handwritten signature



Vestibular Nuclei

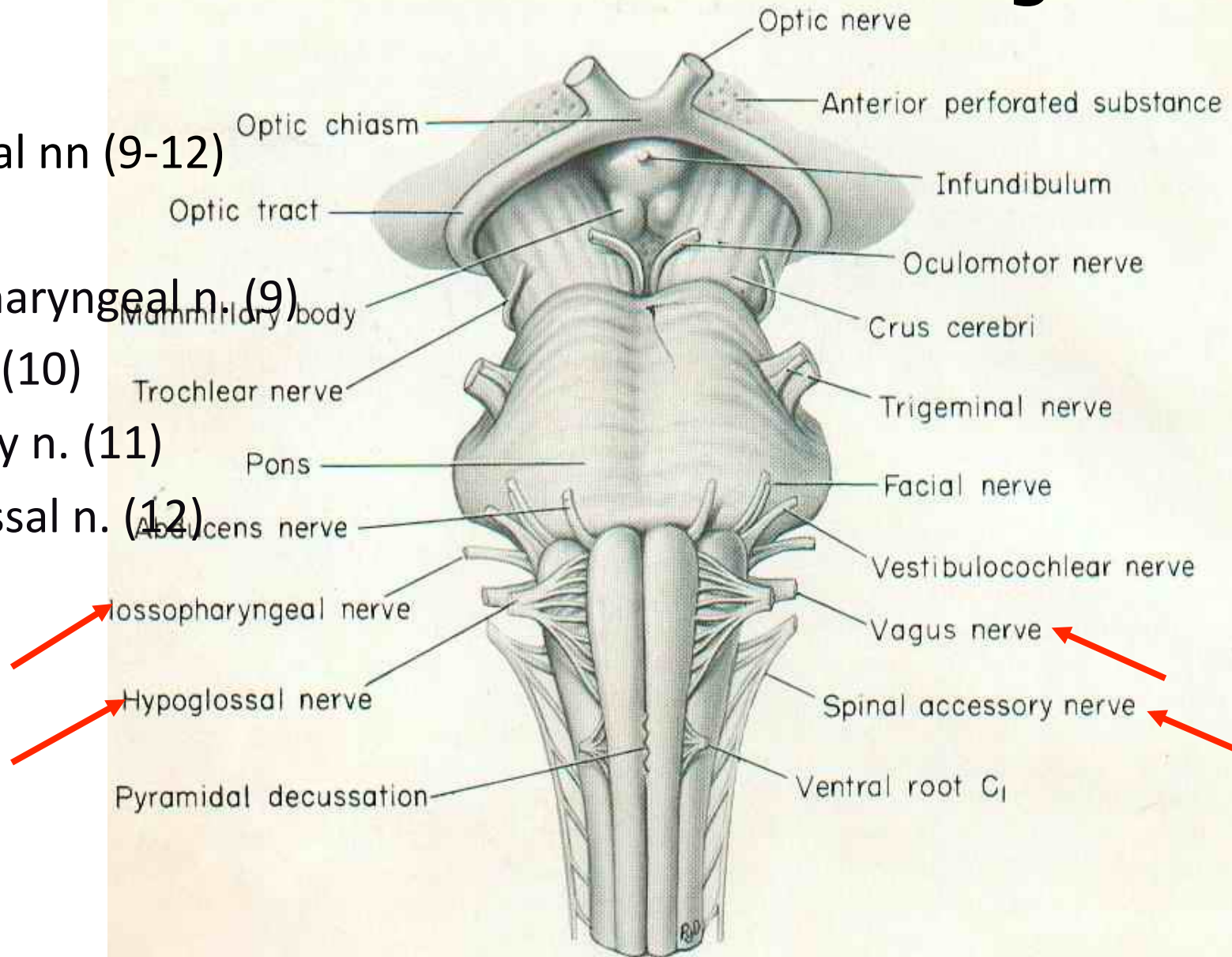
- 4 vestibular nuclei
 - 1-superior (pons)
 - 2-inferior (bulbus)
 - 3-medial (bulbus)
 - 4-lateral (pons)

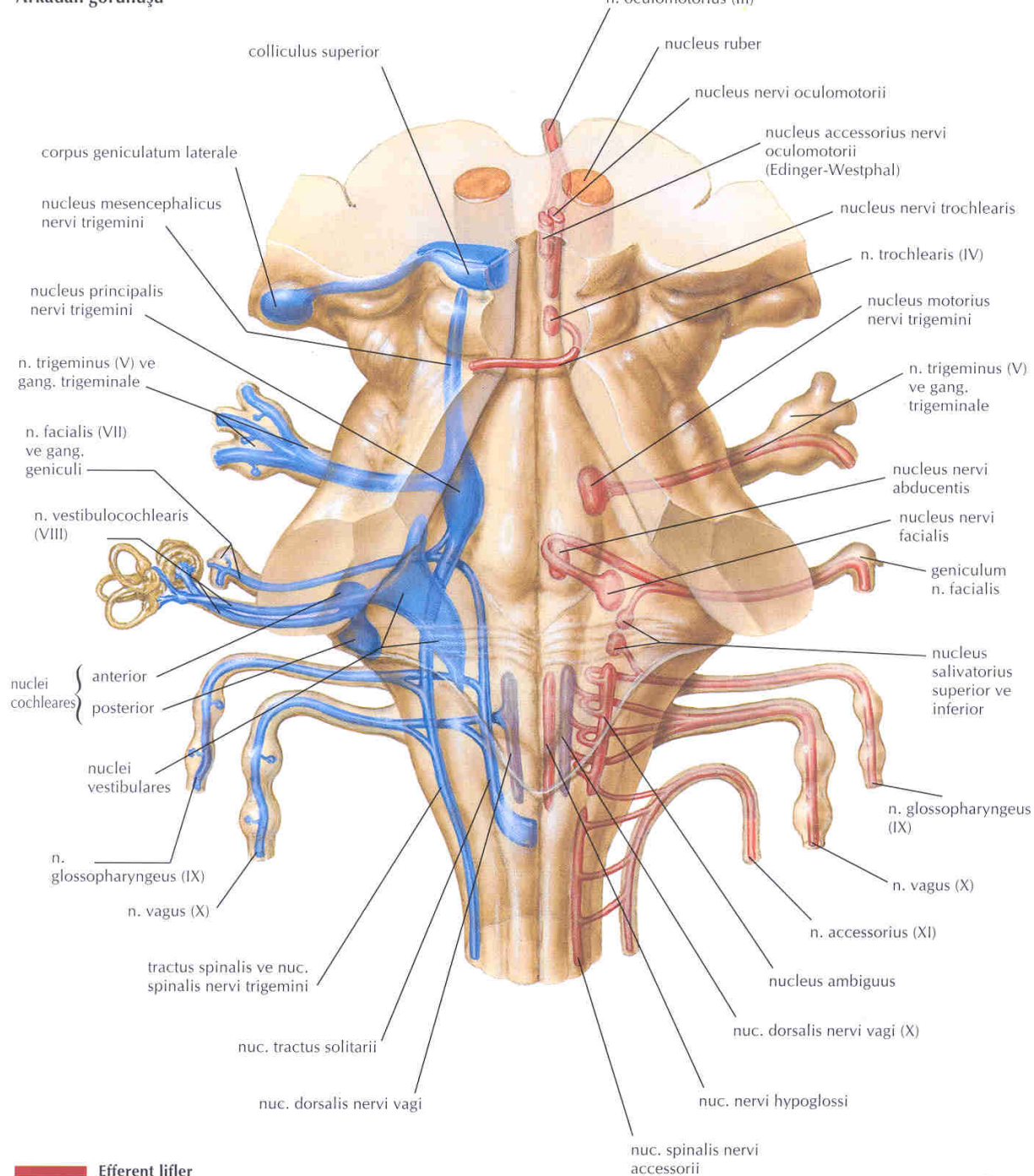


Cranial nerves of medulla oblongata

Last 4 cranial nn (9-12)

- Glossopharyngeal n. (9)
- Vagus n. (10)
- Accessory n. (11)
- Hypoglossal n. (12)



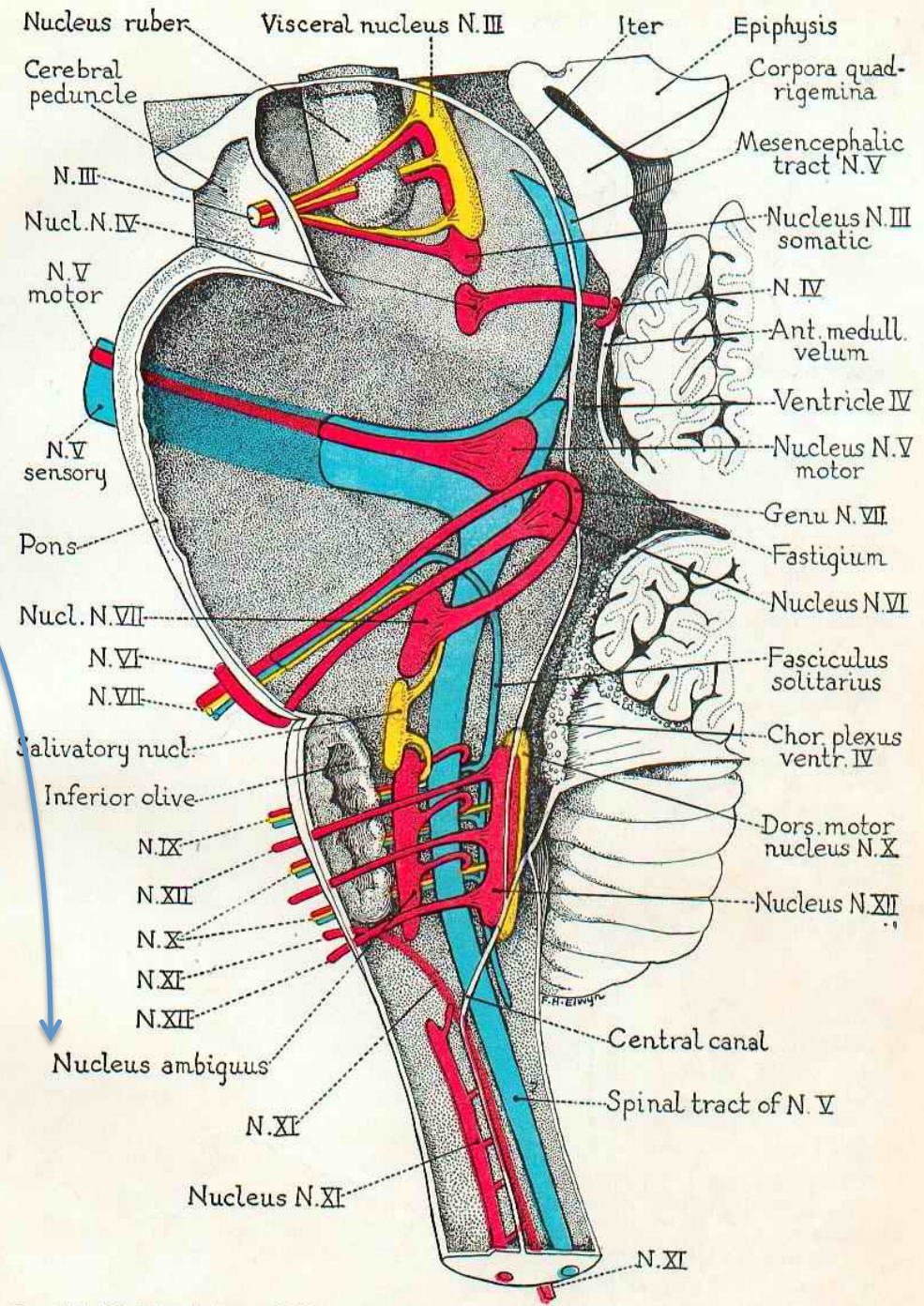


Cranial nerve Nuclei in brainstem

■ Efferent lifler
■ Afferent lifler

Nucleus Ambiguus

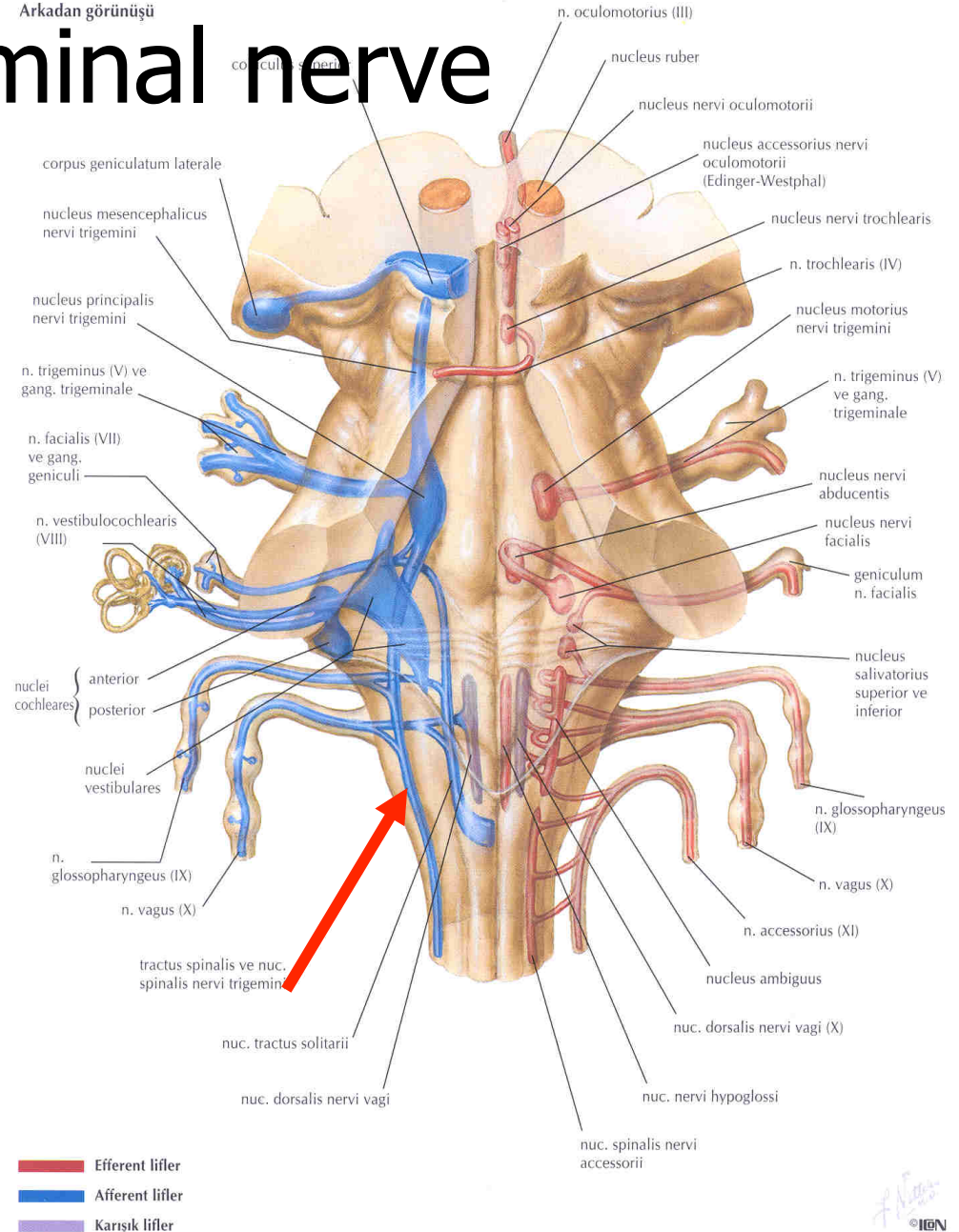
- It is the motor nucleus of glossopharyngeal, vagus, and cranial part of accessory nerves
- nuclei of those 3 cranial nerves unite and form the nucleus ambiguus



Spinal tract and nucleus of trigeminal nerve

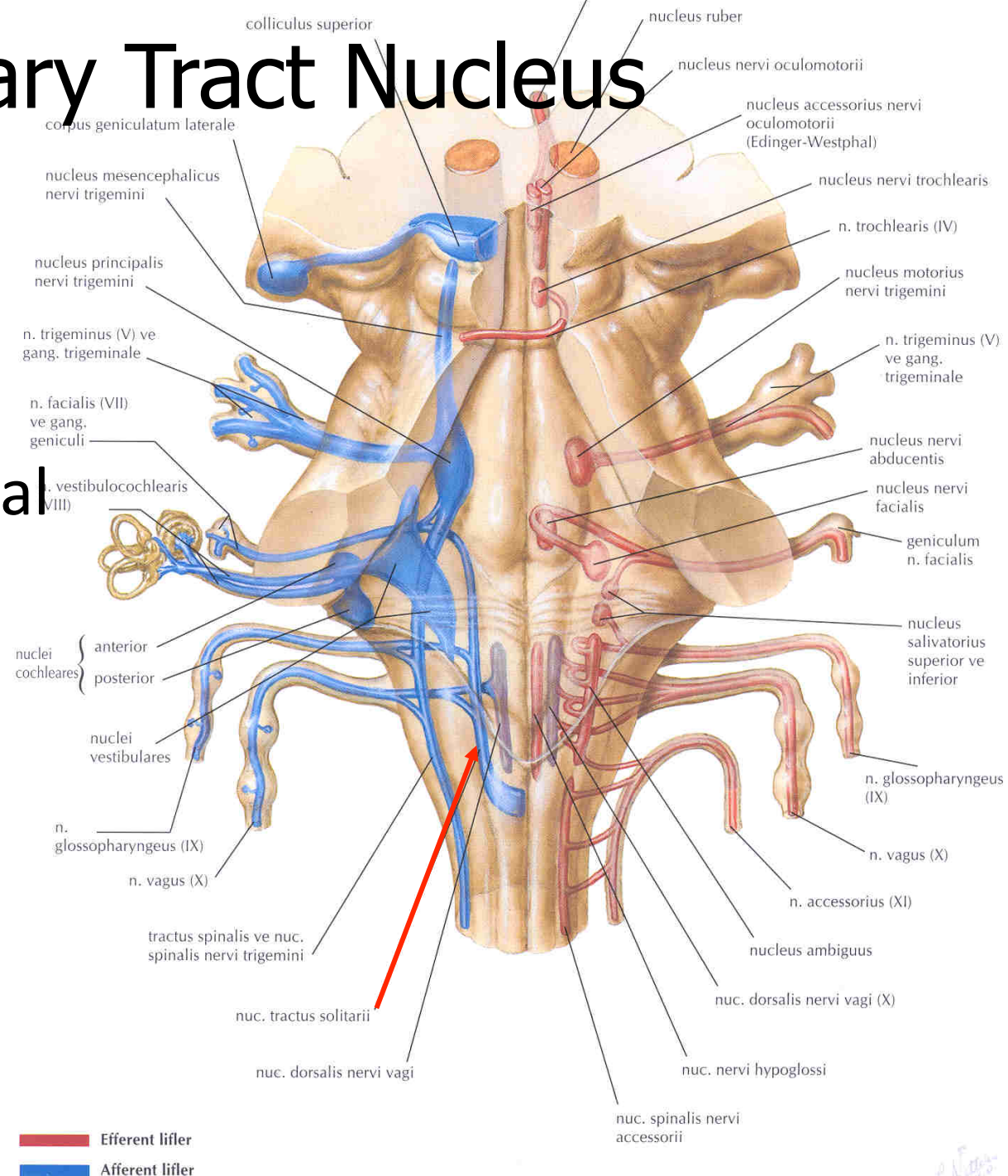
Arkadan görünüşü

- Related to pain and temperature sensation carried from head and neck regions
- Located at pons, medulla and upper 1-2 segments of spinal cord

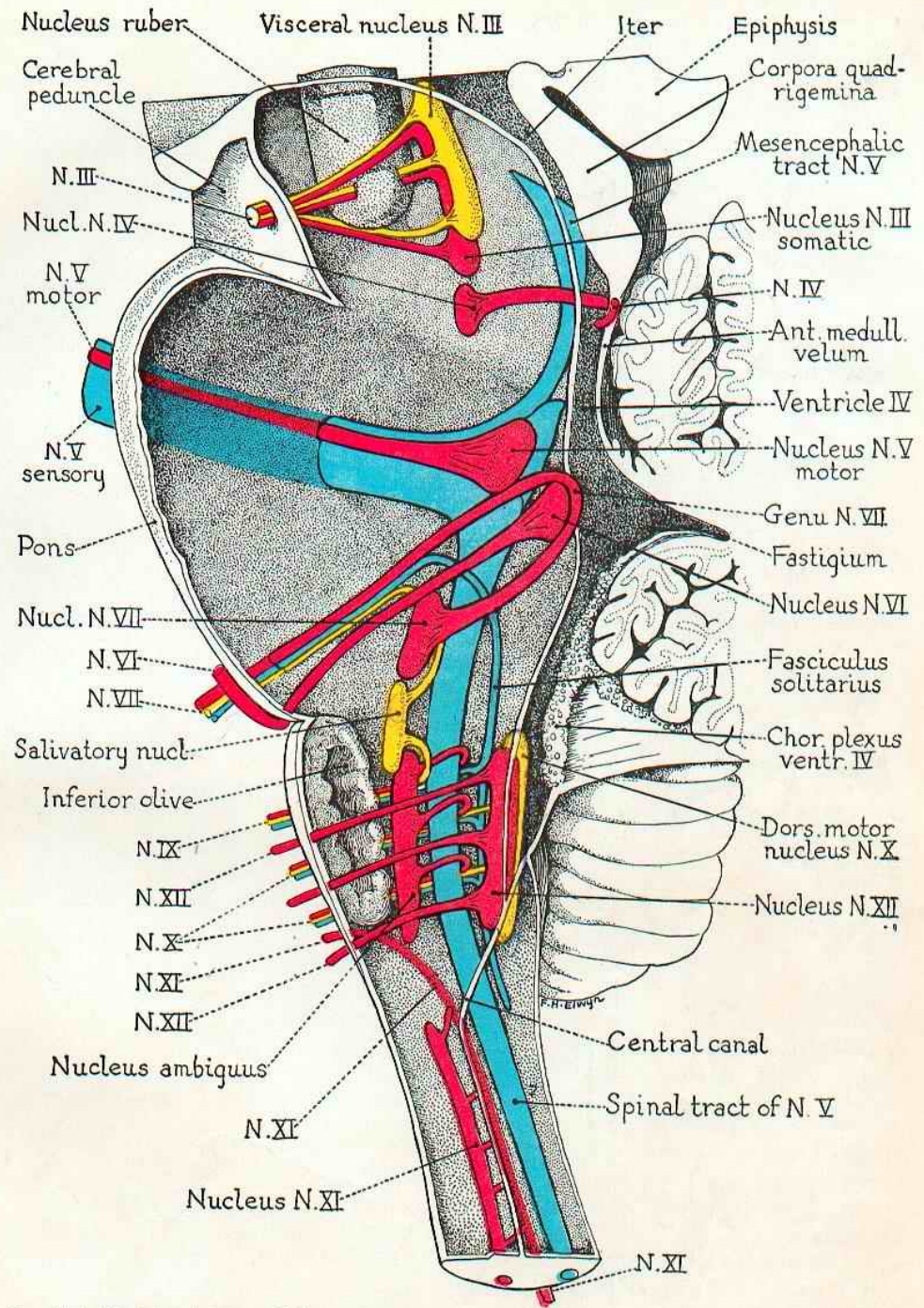


Solitary Tract Nucleus

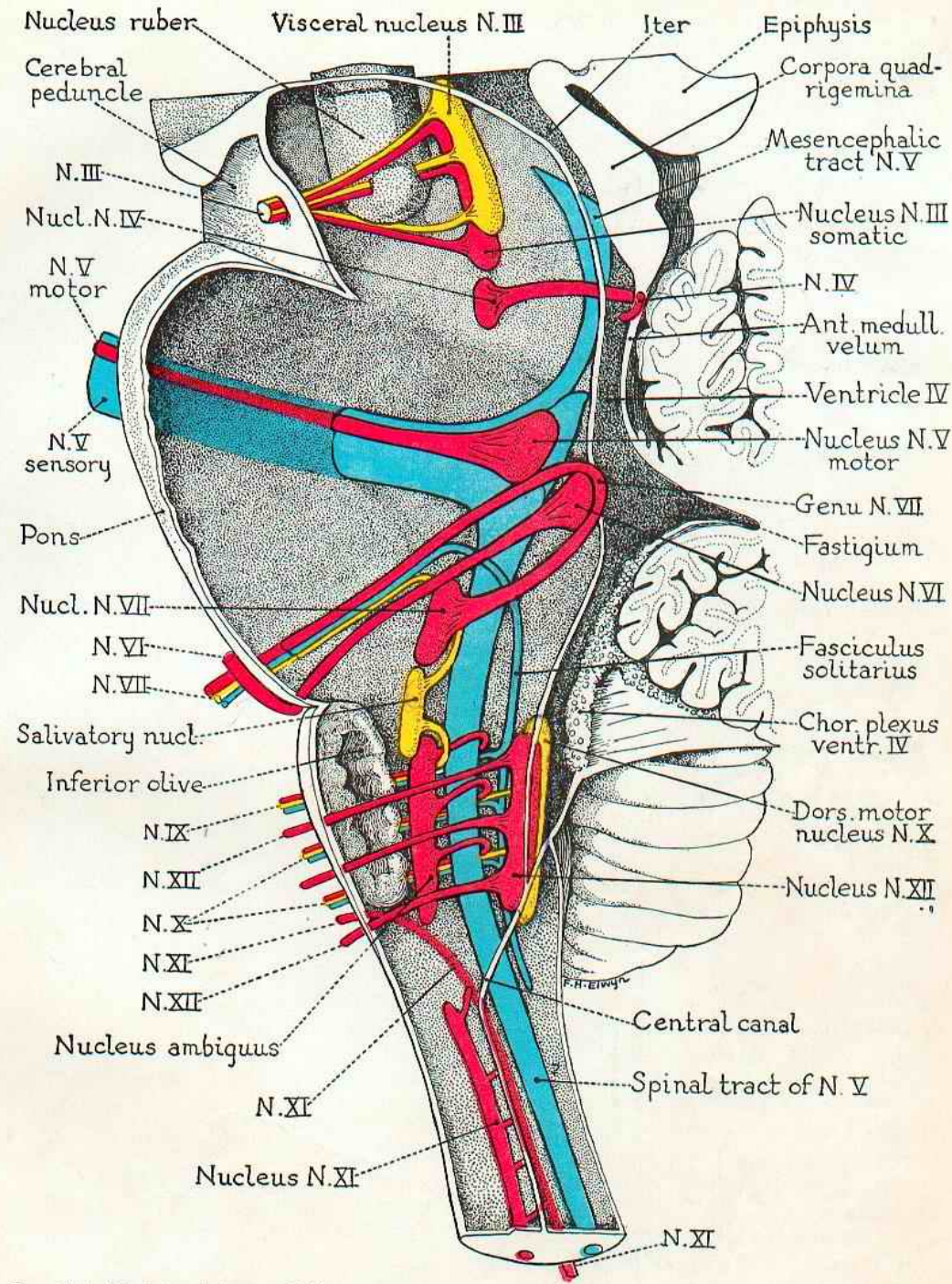
- Related to taste sensation
- 7th and 9th cranial nerves



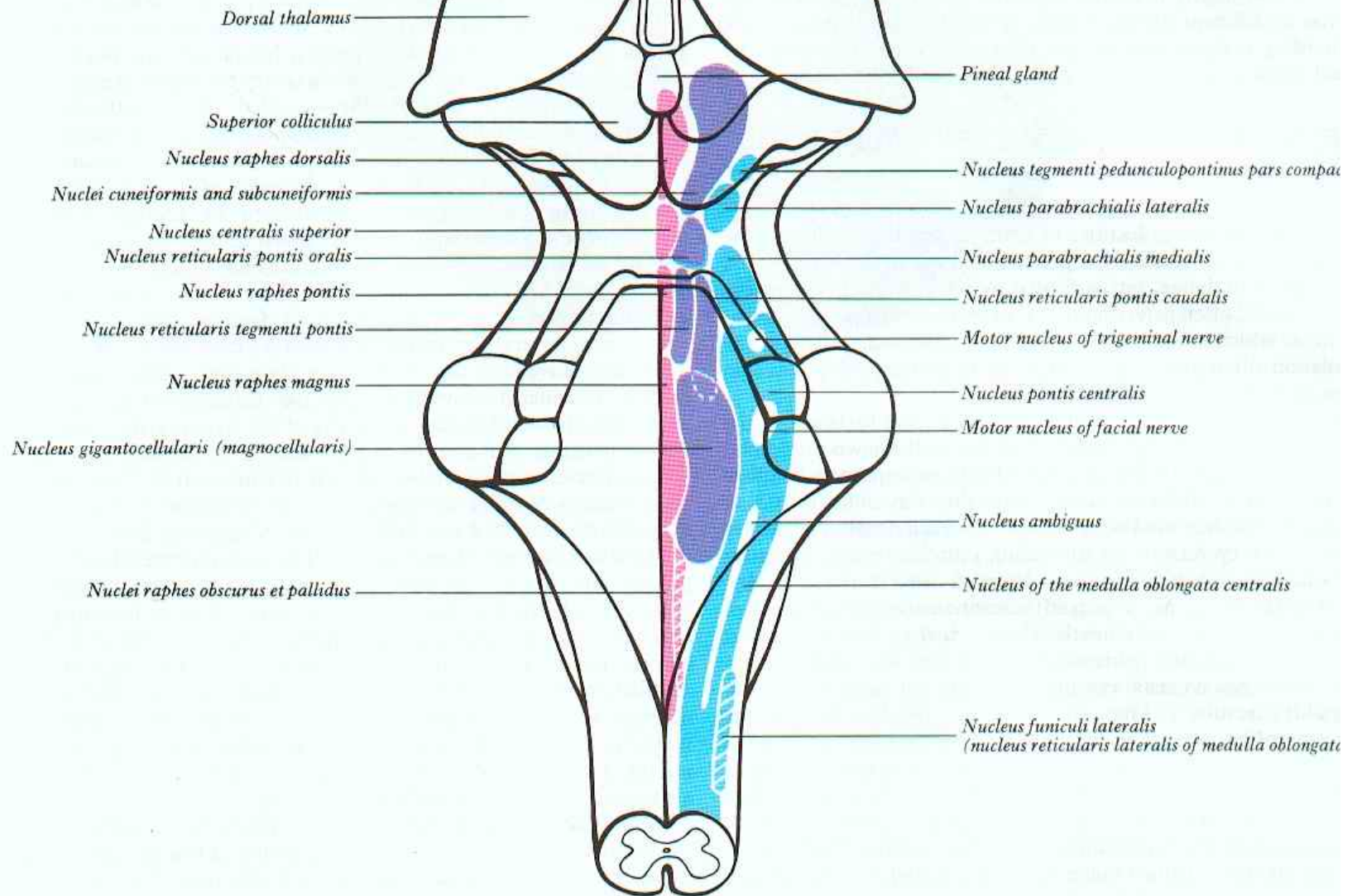
Dorsal Nucleus of Vagus Nerve



Inferior Salivatory Nucleus



Reticular nuclei at medulla level

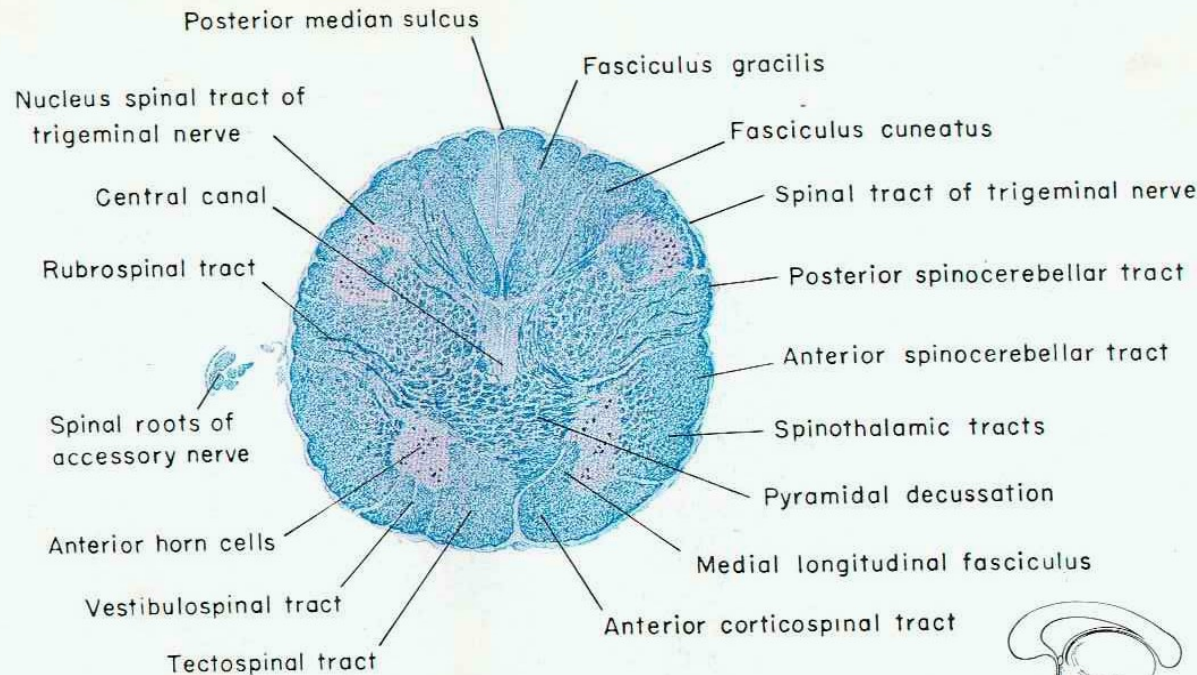
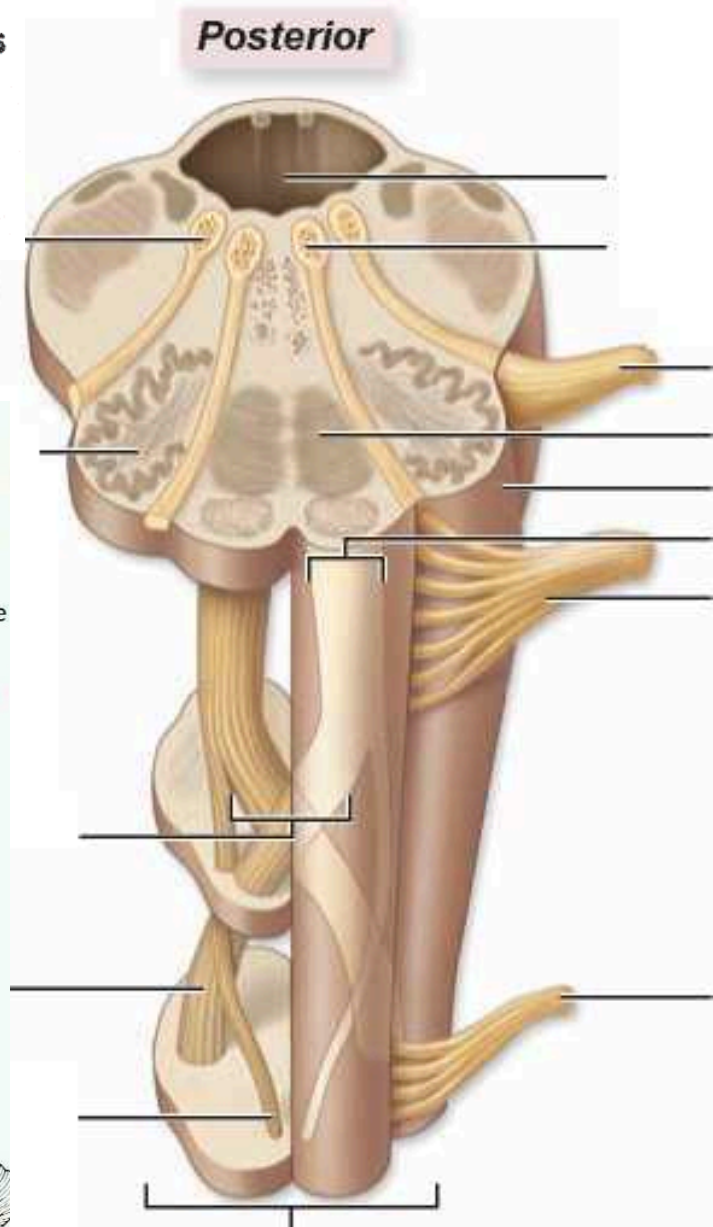
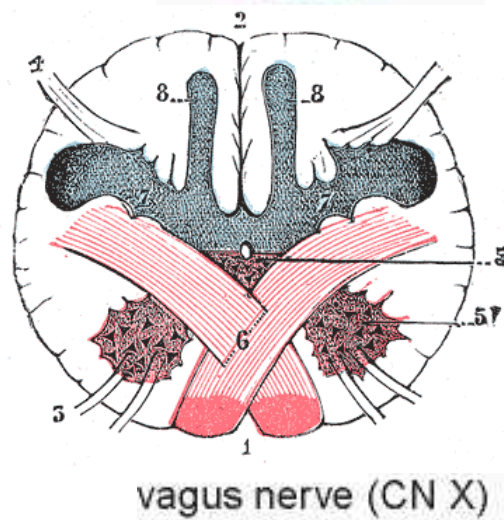


Internal structure

Pyramidal Decussation

Fasciculus gracilis

Fasciculus cuneatus

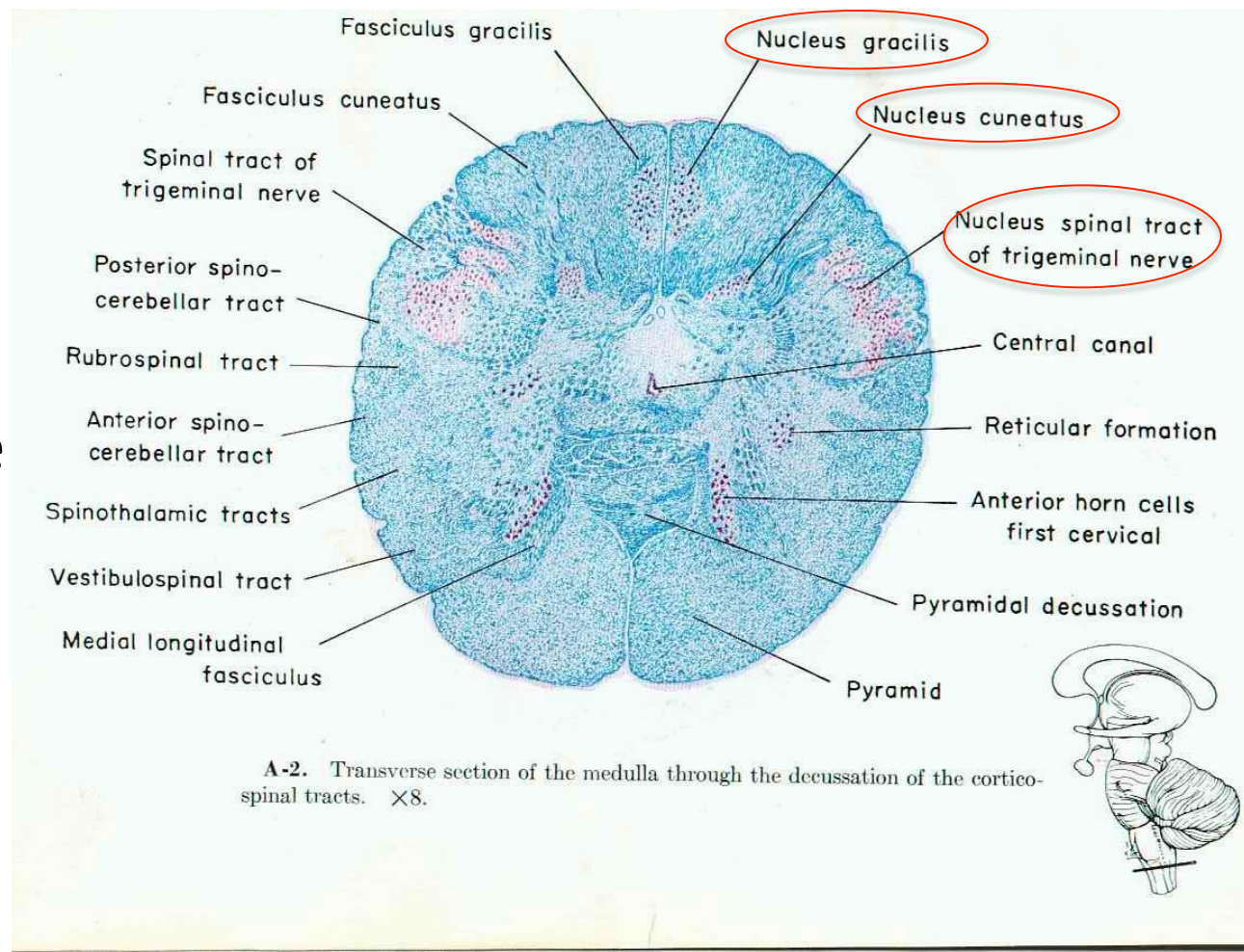


A-1. Transverse section of the caudal medulla near its junction with the cervical spinal cord. X8.



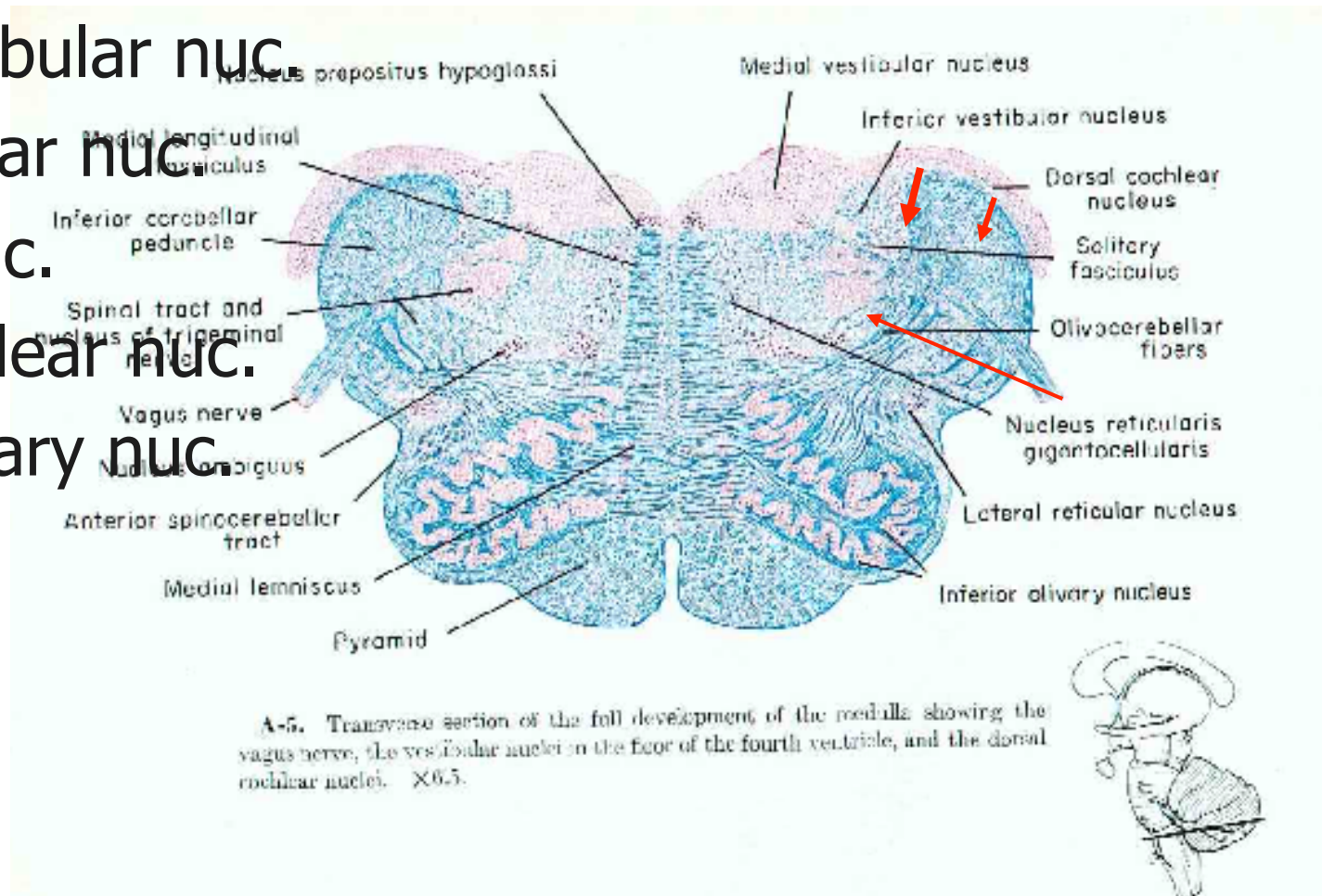
Transverse section at the level of pyramidal decussation

- Nuc. cuneatus
- Nuc. Gracilis
- Spinal tract & nucleus of trigeminal nerve



Transverse section at upper level

- Medial vestibular nuc.
- Inf. vestibular nuc.
- Reticular nuc.
- Dorsal cochlear nuc.
- Inferior olivary nuc.
- Pyramis
- Vagus n



Roof or posterior wall of fourth ventricle :

Superior part of the roof ;

Superior medullary velum

*Cerebral
aqueduct*

ANTERIOR

Pons

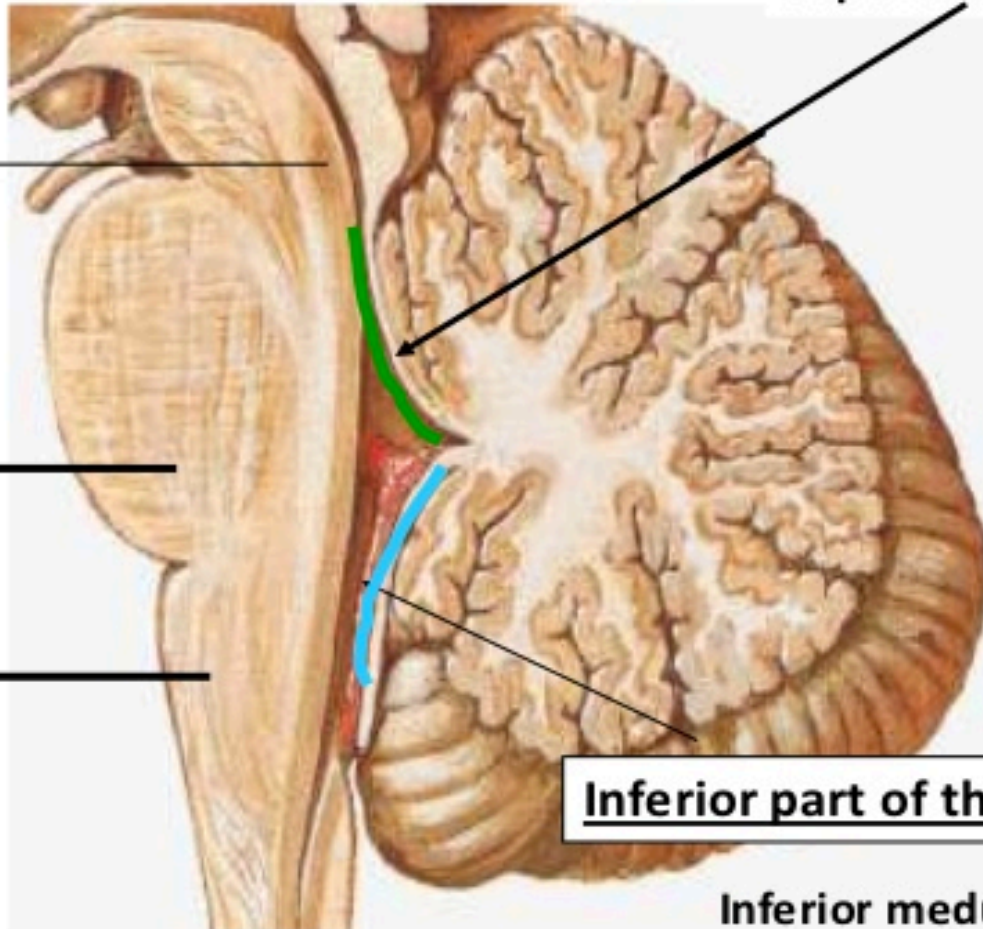
Medulla
oblongata
(superior
half)

POSTERIOR

Inferior part of the roof ;

Inferior medullary velum

Fig. : Sagittal section of the 4th ventricle



That's all Folks!